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**RAW SEQUENCE LISTING  
ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/698, 903 A

Source: 1638

Date Processed by STIC: 01-17-01

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

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TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

**Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be downloaded from the USPTO website at the following address:**

<http://www.uspto.gov/web/offices/pac/checker>

RAW SEQUENCE LISTING DATE: 01/17/2001  
PATENT APPLICATION: US/09/698,903A TIME: 12:13:47

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF3\01172001\I698903A.raw

Does Not Comply  
Corrected Diskette Needed  
See pp. 4, 5

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/698,903A

DATE: 01/17/2001  
TIME: 12:13:47

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF3\01172001\I698903A.raw

88	agctaaacaa	agtccaaaaa	aaacttctca	agtctccatc	tccctttatg	aacattgaaa	1740
90	actatcacaa	aaacaagtc	gataaatctc	tttctqggcc	tgtctccca	acccctcaca	1800
92	tcacttcct	atcggattact	atgtttact	tgtacccccc	ccgttgcatt	gatattgata	1860
94	gtatgtttgt	gaaaactaat	agggttaaca	atcgaagtc	tggaaatatgg	atttggtcca	1920
96	agatttccg	agagcttct	atgtggaaagc	ccatcaccag	aaatttacta	gtaaaataaa	1980
98	tcaccaat	ttttttttat	tatgtccaa	atccaatata	attatagagg	atatttcaaa	2040
100	tggaaacgt	tgaatgttat	tagtaatgg	tcaggtaaga	cattaaaaaa	atccatcgtc	2100
102	agatattca	ctttaaaaat	tcgatcgt	tggaaattgt	caaaaatttg	ggatctacta	2160
104	tatataatata	atgccttaca	acacttggat	ttttttttgg	aggctggaa	ttttaatctc	2220
106	cataatttgtt	ttggccatgc	accactatc	tgtttagtgc	ataactttga	ttttgtcaaa	2280
108	tatatgtgtt	ctgttatatt	tgtataagaa	tttctttgac	catacaca	cacacatata	2340
110	tatataatata	tatataattat	atatacatgc	cttttatttgc	aaaaaataat	atataatata	2400
112	atatgtcatt	ttttcttaca	accatataat	tgcgtattgc	tctgcacaaa	tactqctaga	2460
114	gtatggaaa	ataataatcta	ttgtgttata	tatctcagat	gtttagattt	tcttaaagta	2520
116	aattttttca	aatttttagt	aaaagtcttgc	taataactaa	agaataataac	acaatctcga	2580
118	ccacggaaaa	aaaacacata	ataaaatttgc	attecacccg	cggttaccccg	aattecgagct	2640
120	cgggtacccgg	ggatcttccc	gatcttagtta	catagatgac	accgcgcgc	ataatttata	2700
122	ctagtttgc	cgcttattat	tgttttctat	cgccgttattaa	atgtataattt	ggggactct	2760
124	aatcataaaa	accatctca	taaaataacgt	tcgttattac	atgttattaa	ttacatgttt	2820
126	aacgttatttca	aacaaatattt	atataataat	catcgaaaga	ccggcaacag	gatcataact	2880
128	taagaaactt	tatttgc	tttttgcacg	atcttgcatt	gatcttgcac	agccggaaag	2940
130	tggaaatttgc	cgatcagagt	ttgaagaaaa	atttattaca	cactttatgt	aaagctgaaa	3000
132	aaaaacggcc	ccgcacggaa	cgctttttt	cggttattgc	tttttgcataa	ggtctgtat	3060
134	tggtccgtt	ttttgttaat	cagccagtcg	cttgcgttgc	gaatccggcc	tgaatttctg	3120
136	aacgttgcatt	tatgttat	atccgttca	cgccatgttgc	gtccgttgc	gccccggagt	3180
138	ttgccttccc	tgttttgcata	gatgttcccg	ccgttgcattt	tcccccggacg	gacgttgc	3240
140	agggttccctt	ttgtatggccac	caagccgagg	gtttgttgc	ctgttttgc	aatgtatata	3300
142	tcaggtagt	tatgtatgt	cttgcgttgc	tcgcacaccc	cgccaaacgt	gttgcataacc	3360
144	gttaccatgg	tagtataattt	cttttgcata	aaactttgtat	tttgcgttgc	atgttgcact	3420
146	gttacacttgc	caccacaaagg	gtatataat	agcacaacac	atacacaaca	acttgcacaaa	3480
148	ctaacttttt	ttggacgtt	tgcggaaaa	ttggggatgt	caggcttaatc	tgagggttac	3540
150	attaagggttt	catgtatata	tttgcataa	acatggactt	agtgtggat	aaaagtacca	3600
152	aaatttttgc	tcaccctgtat	ttcagttat	gaaatttacat	tatgttgcgt	tgttgcacaaa	3660
154	gatgtttttt	ctgttgcacgc	caccacattt	atcgttgcatt	gttttgcatt	tgttgcacaaa	3720
156	actgtttat	tttacatgtc	taatgttgc	tacttgcgt	ctatgttgcgt	ttaatttgcag	3780
158	taggttgcatt	atattatgtac	ataaaaatc	atgtttgcatt	catctttcat	aaagtgcacaa	3840
160	gtcaatttgc	ccttttttttgc	ttggcactata	ttcaatctgt	taatgttgcata	tatccatgtt	3900
162	tacttagtca	gatataccat	tttgcataaa	aatagcttgc	gttttgcatt	ccggatagt	3960
164	aaacaaatgc	ataatccatca	aacttctgg	gtctgttgc	aaatgttgc	cgacatgggg	4020
166	ttttaattat	taatttgcata	ataatgcata	ctatgttgc	aaatctcccc	atcgaaaaatg	4080
168	acatgttttgc	acatggaaaa	aaaaaaatgc	tctgtatgaa	gtcgacaaatg	atcacaatatt	4140
170	tctatcgaga	gatagattgt	aagaagtgc	ggggagccgt	taacttgcac	ataacacataat	4200
172	gtcttaattat	atttgcatttgc	ctaaacaaaa	agtgttattac	tctctccgg	ccacaataag	4260
174	ttattttttgc	ccctttttttgc	tatgttgcata	aataatgttgc	ttttttttat	ttcaaaaaatg	4320
176	atataattat	ttttttactat	cagtgccttgc	ggatgttgc	gttttgcatt	atgttgcata	4380
178	aatgtttat	tgttgcata	cagtgccttgc	ggatgttgc	gttttgcatt	atgttgcata	4440
180	aaatgttgc	tttgcataat	tgttgcata	tttgcataat	tttgcataat	gtggaccgga	4500
182	gaaatgttgc	tttgcataat	tgttgcata	tttgcataat	tttgcataat	tattatacga	4560
184	acccaaaaac	agcatatgttgc	agatcttgc	gaatcttgc	cactaaat	aaaaagaa	4620

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/698,903A

DATE: 01/17/2001  
 TIME: 12:13:47

Input Set : A:\Sequence Listing.txt  
 Output Set: N:\CRF3\01172001\I698903A.raw

186 gcaacaagta tcautacata tgatttacac cgtcaaacac gaaattcgta aatatttaat	4680
188 ataataaaga attaatccaa atagccctccc accctatataac tttaactaataa aataaccgc	4740
190 gaatgtataat tataatgcata atttataatataaataatgtata taatcatgtataatcaatgt	4800
192 ataatctatg tataatgtta gaaaaatgtaa acaatataaataatgcataatgtataatgttaaa	4860
194 aatccctataat ataaatcgca cggatccccg ggaattccgg ggaatgttag atccatcgac	4920
196 atctgatcat gagcggagaa tttaaggagat cactgttataa cccccggcga tgacgcggga	4980
198 caaggccgtt tacgttigga actgacgaa ccgcaacatg tyaaggagcc actcagccgc	5040
200 gggtttcgtt agtttaatgtt gatgttgcata tacgttgcagaa accattatttgcgttccaa	5100
202 agtcgcctaa ggtcaatc agetgtcataa tatttctgtt caaaaatgtt ccactgtacgt	5160
204 tccataataa cccctcgta tccataatgtt gttctatattt cacttcaat ccaaaaccatg	5220
206 aaaaaagcag tcatataacgg ggaacaaatc agaagatataa cgcacatcca ccagacattt	5280
208 aaaaaggcgtt ttgccttcc ggaatactac ggtgaaaacc ttggacgtttt atgggattgt	5340
210 ctgaccggat ggggtggatgat cccgcgtt ttggatgtt ggcagtttga acaaaycaag	5400
212 cayctgactt aaaaatggcgcg cggatgtgtt cttcagggtt tccgtgaagc gaaagcggaa	5460
214 ggctgcgaca tccatccatcattttttttaa tacgtatcaat gggagatgaa caatatggaa	5520
216 acacaaaccc gcaagttgg tctagaggat ccccccgtatg gctaaatgtatc ctatatcatc	5580
218 aattttatgtt ttacacataa tatttgcactc agtctttcat ctacggcaat gtaccatgtt	5640
220 atataatctatc ttattttatatttctgtat tttaaacttgc atcaataataat ttatgtttt	5700
222 gcttggacta taatatactgtt cttgttattt tttcaataaaat tattttaaact atatttttt	5760
224 caagatggaa attaataatctt acaaaatttgcgtt ttttttttcc gaccatgtac atcgatct	5820
226 ccccaacatc gcatggagcc atttataattt gatatataatcc tgccg	5865
229 <210> SEQ ID NO: 2	
230 <211> LENGTH: 21	
231 <212> TYPE: DNA	
232 <213> ORGANISM: Artificial Sequence	
234 <220> FEATURE:	
235 <221> NAME/KEY: misc_feature	
236 <222> LOCATION: (1)..(21)	
237 <223> OTHER INFORMATION: primer MDB355	
240 <400> SEQUENCE: 2	
241 gtaacataga tgacaccgcg c	21
244 <210> SEQ ID NO: 3	
245 <211> LENGTH: 21	
246 <212> TYPE: DNA	
247 <213> ORGANISM: Artificial Sequence	
249 <220> FEATURE:	
250 <221> NAME/KEY: misc_feature	
251 <222> LOCATION: (1)..(21)	
252 <223> OTHER INFORMATION: primer MLD008	
255 <400> SEQUENCE: 3	
256 atagggtggg aggcttattt g	21
259 <210> SEQ ID NO: 4	
260 <211> LENGTH: 15	
261 <212> TYPE: DNA	
262 <213> ORGANISM: Artificial Sequence	
264 <220> FEATURE:	
265 <221> NAME/KEY: misc_feature	
266 <222> LOCATION: (1)..(15)	
267 <223> OTHER INFORMATION: primer MDB285	

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/698,903A

DATE: 01/17/2001  
TIME: 12:13:47

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF3\01172001\I698903A.raw

270 <220> FEATURE:  
271 <221> NAME/KEY: variation  
272 <222> LOCATION: (6)..(6)  
273 <223> OTHER INFORMATION: "s" can be either g or c  
276 <220> FEATURE:  
277 <221> NAME/KEY: variation  
278 <222> LOCATION: (1)..(1)  
279 <223> OTHER INFORMATION: "n" can be any nucleotide a, c or t, or g  
282 <220> FEATURE:  
283 <221> NAME/KEY: variation  
284 <222> LOCATION: (8)..(8)  
285 <223> OTHER INFORMATION: "w" can be either a or t(u)  
288 <220> FEATURE:  
289 <221> NAME/KEY: variation  
290 <222> LOCATION: (12)..(12)  
291 <223> OTHER INFORMATION: "w" can be either a or t(u)  
294 <220> FEATURE:  
295 <221> NAME/KEY: variation  
296 <222> LOCATION: (10)..(10)  
297 <223> OTHER INFORMATION: "s" can be either g or c  
300 <400> SEQUENCE: 4  
W--> 301 ntgcgatwts'gwgtt 15  
304 <210> SEQ ID NO: 5  
305 <211> LENGTH: 25  
306 <212> TYPE: DNA  
307 <213> ORGANISM: Artificial Sequence  
309 <220> FEATURE:  
310 <221> NAME/KEY: misc\_feature  
311 <222> LOCATION: (1)..(25)  
312 <223> OTHER INFORMATION: MDB251  
315 <400> SEQUENCE: 5 25  
316 ggatcccccg 'atgagetaag ctacg  
319 <210> SEQ ID NO: 6  
320 <211> LENGTH: 22  
321 <212> TYPE: DNA  
322 <213> ORGANISM: Artificial Sequence  
324 <220> FEATURE:  
325 <221> NAME/KEY: misc\_feature  
326 <222> LOCATION: (1)..(22)  
327 <223> OTHER INFORMATION: primer MDB193  
330 <400> SEQUENCE: 6 22  
331 tcatctacgg caatgtacca gc  
334 <210> SEQ ID NO: 7  
335 <211> LENGTH: 20  
336 <212> TYPE: DNA  
337 <213> ORGANISM: Artificial Sequence  
339 <220> FEATURE:  
340 <221> NAME/KEY: misc\_feature  
341 <222> LOCATION: (1)..(20)

Primer?

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/698,903A

DATE: 01/17/2001  
TIME: 12:13:47

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF3\01172001\I698903A.raw

342 <223> OTHER INFORMATION: MDB258 *Primer?*  
 345 <400> SEQUENCE: 7  
 346 ctacggcaat gtaccagctg 20  
 349 <210> SEQ ID NO: 8  
 350 <211> LENGTH: 415  
 351 <212> TYPE: DNA  
 352 <213> ORGANISM: Artificial Sequence  
 354 <220> FEATURE:  
 355 <221> NAME/KEY: misc\_feature  
 356 <222> LOCATION: (1)..(415)  
 357 <223> OTHER INFORMATION: right (5') border flanking region of elite event MS-B2  
 360 <400> SEQUENCE: 8  
 361 gtcgagttg gtgttcatga ttttgggtt tgactttca ccattacata ttgaaaactct 60  
 363 tacggatgag aacaactcac aaggattaaat catgttccata taaatataatg tacattatac 120  
 365 gtatatacac acgtatataaa atatgtacgaa agaaaatccat gtaaagcagc agggggcacc 180  
 367 atggtttcaa gtattatata attataatta taattatgtt aggtatgtaca tggccgataa 240  
 369 gaaaaggcaa tttgtatgtttaatccca tcttggaaaga aatatagttt aaatatttt 300  
 371 tttaaaaata acaagtccagg tattatagtc caaagaaaaa cattaaatttt ttgatgcagg 360  
 373 tttaaatca gaaatatttc aataactgtat tttatgtt ggtacatttc cgttag 415  
 376 <210> SEQ ID NO: 9  
 377 <211> LENGTH: 24  
 378 <212> TYPE: DNA  
 379 <213> ORGANISM: Artificial Sequence  
 381 <220> FEATURE:  
 382 <221> NAME/KEY: misc\_feature  
 383 <222> LOCATION: (1)..(24)  
 384 <223> OTHER INFORMATION: primer MDB8  
 387 <400> SEQUENCE: 9  
 388 tcagaagttt cagcgaccc cacc 24  
 391 <210> SEQ ID NO: 10  
 392 <211> LENGTH: 416  
 393 <212> TYPE: DNA  
 394 <213> ORGANISM: Artificial Sequence  
 396 <220> FEATURE:  
 397 <221> NAME/KEY: misc\_feature  
 398 <222> LOCATION: (1)..(416)  
 399 <223> OTHER INFORMATION: left (3') border flanking region of the elite event MS-B2  
 402 <400> SEQUENCE: 10  
 403 ctacggcaat gtaccagctg atataatccat ttattgtaaat atttctgtat ttaaacttgc 60  
 405 atcaataaaaw ttatgtttt gcttggacta taataccctga ctgttatttt tatcaataaaa 120  
 407 tatttaatccat ttatccatccat aattataattt attatccat aataactgtt acaaatggcc ttttcttata 180  
 409 gaccatgtac atccatccat aattataattt attatccat aataactgtt acaaatggcc 240  
 411 ccctgtctgt ttacatggat ttctccgtta ctatccatccat acaaatggcc ttttcttata 300  
 413 atgtatccat atttccatccat acaatgtt acaatgtt acaatgtt acaatgtt 360  
 415 ttcaatccatccat aatggtgaag agtccaaaacc caaaatccatccat aacacccaaa ctcgtat 416  
 418 <210> SEQ ID NO: 11  
 419 <211> LENGTH: 23  
 420 <212> TYPE: DNA  
 421 <213> ORGANISM: Artificial Sequence

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/698,903A DATE: 01/17/2001  
TIME: 12:13:48

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF3\01172001\I698903A.raw

L:301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4